BRITISH GLIDING ASSOCIATION

BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET TNS 1/2/93

PART 1 The 1993 (Blue Pages) Compendium of Airworthiness Directives, Mandatory Modifications, Special Inspections and Check List of Defects, is enclosed herewith. Please destroy the 1992 Red Pages!

1.1. Cirrus/Cirrus VTC. T/Note 265-10 (herewith) requires replacement of coupling balls on Airbrake Activating Lever due to a fatigue failure witnessed in UK. LBA/AD/93-103 Refers.

1.2. Schempp Hirth Types, as detailed in multiple Tech-Notes, abbreviated version herewith and sent to owners, requires replacement (and testing) of Elevator Vertical Drive Rod due to corrosion. (Some bad samples seen in the UK). Full compliance required by December 1993!

1.3. Puchacz - Canopy Jettison pins migrate out-of-safety. Southdown G.C. have fitted a Turnbuckle to the rear canopy operating lever, and have also introduced an external handle. (Ron King).

1.4. Glaser-Dirks DG400 and DG500 S.L.M.G.'s. CAA Foreign Airworthiness Directives (Vol III), latest issue, enclosed herewith.

1.5. Grob G.109's. Latest issue of Foreign A/D's (Vol III) is attached.

1.6. Scheibe SF25C Recurring Exhaust Valve Burning (Rear Cylinder). Limbach have advised BGA that an improved rear cylinder cooling Baffle Kit is available from Limbach. UK Agents for Scheibe have been advised .

1.7. RF5 Series Speed Brake Clevis Pins damaged. Aviostar SB-02-91 (herewith) explains the problem. (UK Agents Soaring Equipment).

1.8. Grob Twin Accro 2 - Rudder Pulleys Cracked. White (Nylon?) plastic pulleys have been found to be radially cracked (all the way!) on several sailplanes in the UK - Replace as soon as possible.

1.9. SZD - 30 "Pirat" Danish A/D 92-143-038(D) draws attention to inferior bonding leading to plywood separation ahead of the airbrakes. Pirats manufactured in 1967 have been identified defective on Swedish Registry. SB's 030/90 and 027/87 extend the Service Life beyond 1000 flights to 2600 hours.

1.10. ASK7's & 13's Severely corroded Fin Mountings. Sketch herewith illustrates the severity of the problem.

1.11. "Top" Power Plants - Connecting Rod bearing replacement. A/D 93-005 (herewith) applies. (We have one in the UK!).

1.12. Cockpit Cushions - following a recent fatality in the UK a BGA SAFETY FLASH has been issued, warning against the issue of SOFT materials - why not DESTROY them!

1.13. Engine Controls in S.L.M.G's, where automotive type choke, throttle and carb heat controls are used, particular attention must be made at regular intervalsto for full and free movement, and the security of the outer casings. (Reported by J. Clarke).

1.14. Top Harness Attachments (Some Astirs/T.61's?SF25's etc). Top Harnesses must be secured to the transverse tube, and not to the guide rail (if fitted), which failed on impact, causing facial damage. (Photos herewith).

1.15. Grob G.102 Astirs - Spigot Replacements, which the manufacturer required to be replaced by December 1992, must now be completed before C.of.A. renewal 1993. BGA Inspectors please endorse FORM 267 to show compliance. (BGA Tech. Committee 20/1/93).

1.16. L'Hotellier Connectors. Connectors which have been in continuous use on a KA21 for 28,500 flights and 5,800 hours have been found to be fully serviceable. Lubrication with grease is essential. SAFETY PINS should be installed as a final check of correct assembly.

1.17. SZD "Junior". Rudder Cables may be the cause of high friction, because of presets in the cables. Replace with more flexible cable.

1.18. Slingsby "Vega". Lower Harness Attachments to the Fuselage. As the result of AAIB comments on the attachments to the "bath-tub" failing in a fatal accident. inspection of these attachments for total integrity should be made.

1.19. DG500's Rudder Sealing to eliminate vibration. LBA/AD/93-009 (herewith) refers.

1.20. ASW 20F. Reduction of Rough Air Speeds. Airworthiness Directive 93-004(A) herewith, reduces the Rough Air Speed from 98K to 96K. Please amend placards and Flight Manual.

1.21. PA18-Series Cubs - unprotected MAGNETO Switches. Extract from GASIL 1/93 illustrates a stupid modification. Are your Mag Switches vulnerable?

PART 2 **GENERAL MATTERS**

2.1. Blaniks, Extention of Service Life. The "Manual of operation of the Blanik Sailplane, without overhauls" is available from UK Distributor as indicated herein.

2.2. Catalogue of Tech. Notes Received. (Copies from UK Agents).

Glaser-Dirks

TN 826/26	DG400 - Manual Revisions. Flight Maintenance and Repair.
826/27	DG400 - Exchanging Bosch/Ducati Ignition systems.
843/3-2	(28/10/92) DG500 Airbrake Control. Cracked Welding.
348/2-2	(28/10/92)
843/4	DG500 Exchanging Bosch/Ducati Ignition Units.
843/5*	DG500 Manual Revisions.(Flight/Maintenance/ Repair).
348/35*	DG500/22 Elan. Manual Revisions (Flight/ Maintenance/Repair).
348/3T*	DG500 Elan. Manual Revisions (Flight/ Maintenance/Repair).

* Includes Rudder Gap Sealing to eliminate vibration.

Schempp-Hirth

Collective Tech. Note Powered Sailplanes:

809-9	Janus CM & CT
825-17	Nimbus GT, CT and CM
847-4	Nimbus - 3DT and 3DH
863-3	Discus GT

Requires new vertical elevator actuating rod in the fin by December 1993.

2.3. Oleo Replacements & Spares. The Blanik Oleo/pneumatic undercarriage suspension unit is also used in the IS28 Series gliders. Spares are available from Peter Clifford & Co. 0491 39316, Fax 0491 393316.

2.4. Weak Link Ratings - the current list based on Tost information, is repeated herewith.

Dick Stratton
Chief Technical Officer

Schempp-Hirth
Flugzeugbau GmbH
Krabenestraße 25 - Postfach 1443
D-7312 Kirchheim unter Teck
LBA-Nr. I B 5

TN 11/93.

TECHNICAL NOTE NO.

Sent to owners
By BGA 20/11/93

278 - 33
286 - 28
295 - 22
328 - 10
349 - 16
360 - 9
373 - 5

Page No. 1

No. of pages 4

Subject : Vertical elevator actuating rod inside the fin

Affected :

Sailplane model	Type Certificate No.	Serial numbers affected
Standard Cirrus G	278	all
Nimbus-2B Nimbus-2C Nimbus-3 Nimbus-3/24.5	286	all
Janus B ~~CM~~ Janus C ~~CT~~ Janus Ce	295	up to S/N 284
Mini Nimbus B Mini Nimbus C	328	all
Ventus a Ventus b Ventus a/16.6 Ventus b/16.6	349	all
Ventus c ~~bT/ct~~ CM	349	up to S/N 568
Discus a Discus b	360	up to S/N 446
Discus CS ~~BT~~	360	up to S/N 98
Nimbus-3D	373	up to S/N 11

Urgency :

Action (1) and (2) : Prior to next flight

Action (3) and the following : Not later than December 31st, 1993

Reason : By coincidence of unfavourable circumstances, the rubber bellows in the upper end rib of the fin (sealing the control rod opening) may become filled with water, which - with the elevator secured in "fully up" position - may seep through the bolt verification hole in the vertical elevator actuating tube and accumulate at its lower end.

A failure of this tube due to corrosion - directly above the welded seam of the U-shaped rod end - is therefore possible.

Actions : Prior to next flight:

(1) Load test of the elevator control system

Remove horizontal tailplane, lock elevator actuating lever as shown in the sketch found in the appendix and pull back the control stick with the force prescribed.

(2) Thereafter mount the tailplane and check elevator for proper function with the aid of a helper.

If no objections can be raised as to the perfect function of the elevator control (after having accomplished step (1) and (2)), then the following actions are to be carried out by December 31st, 1993 at the latest.

(3) Remove vertical elevator actuating rod in compliance with the instructions given in the appendix.

(4) Install a replacement elevator actuating rod (designation shown on page 3) - the relevant instructions are given in the appendix.

(5) Mount horizontal tailplane and adjust ball bearing rod end (or U-shaped rod end) such that the elevator deflections are within the permitted range (see Maintenance Manual).
Thereafter apply a red witness mark to jam nut and thread.

Weight : No alteration

C/G position : No alteration

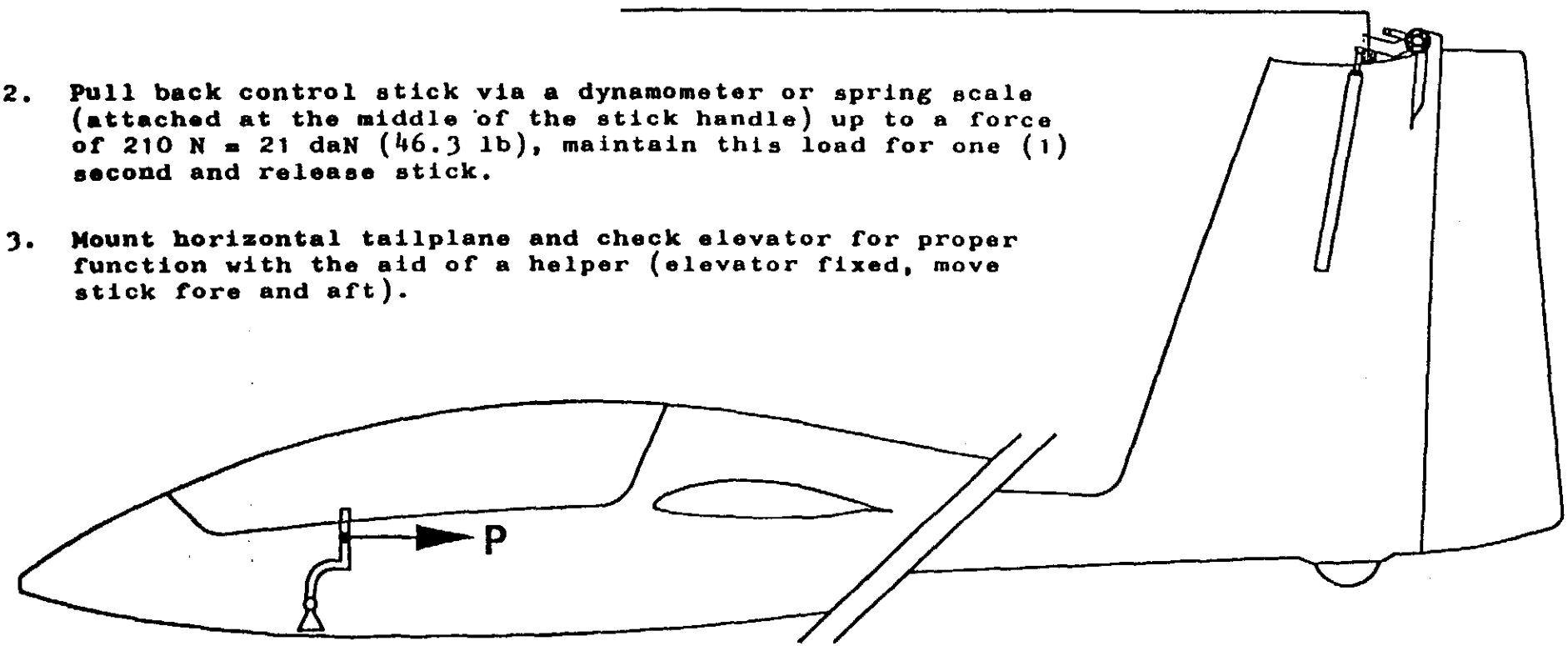
(3)

Load testing the elevator control system

1. Position a solid steel rod or a steel tube (ϕ 12 to 16 mm/ 0.47 to 0.63 in.) between the elevator actuating lever and the skin of the fin projecting above the end rib.

2. Pull back control stick via a dynamometer or spring scale (attached at the middle of the stick handle) up to a force of 210 N = 21 daN (46.3 lb), maintain this load for one (1) second and release stick.

3. Mount horizontal tailplane and check elevator for proper function with the aid of a helper (elevator fixed, move stick fore and aft).



The full text of this Tech. Note is available for UK agents

Schempp-Hirth
Flugzeugbau GmbH
Krebenstraße 25 - Postfach 1443
D-7312 Kirchheim unter Teck
LBA-Nr. 185

TECHNICAL NOTE NO. 265-10

Subject : Control rod coupling balls on airbrake actuating lever inside the fuselage

Affected : Sailplanes model "Cirrus" and "Cirrus VTC"
(F.R.G. Type Certificate No. 265)
- all serial numbers

Urgency : a) After reaching a service time of 500 hours.
b) With a service time of more than 500 hours, on the occasion of the next annual inspection, but not later than March 31st, 1993.

Reason : On a sailplane with a high service time, the coupling balls on the airbrake actuating lever inside the fuselage have broken at the thread end due to fatigue.

Actions :
1. Remove both coupling balls.
2. Make a recess with a depth of 2.5 mm/0.10 in. and a diameter of 6.0 mm/0.24 in. into the flank of the lever facing the flange on the coupling balls (drill bit angle > 115°).
3. Install replacement coupling balls.
4. Amendment of the Service Manual:
   Page 25 - Maintenance
   (amended page dated November 1992)

Weight : No alteration

C/G position : No alteration

Material : Replacement coupling balls (Part No. MS 961.150.150.L3) may be obtained from

Schempp-Hirth Flugzeugbau GmbH
Krebenstraße 25
7312 Kirchheim u. Teck
FED. REPUBLIC OF GERMANY

Note : The actions may be carried out by a skilled person. Their accomplishment must be inspected by a licensed inspector and be entered in the aircraft log book.

Kirchheim/Teck, Nov. 5, 1992

Issued: H. Treiber

(H. Treiber)

LBA-approved:

The German original of this Technical Note has been approved by the LBA under the date of Dec. 10, 1992, and is signed by Mr. Skav. The translation into English has been done by best knowledge and judgement. In any case of doubt the German original is authoritative.

"TOP" Power plant

URGENT * URGENT * URGENT * URGENT

AIRWORTHINESS DIRECTIVE

93-005 Fischer + Entwicklung

Date of issue:
18. Dez. 1992

Affected engines:
German Type Certificate No. 5004

Fischer + Entwicklung
TOP, Kiwi TOP und ASW TOP
-S/N: up to 76, except no. 71, 43, 19, 14, 11 and 1

Subjekt:
Exchange of connecting-rod bearing cages and needles

Reason:
In some cases damages of the connecting-rod bearings occured. This could result in sudden loss of power and subsequent complete stop of the engine.

Actions:
Bearing cages and needles of the connecting-rod bearings have to be replaced by the new type FAG 26-2778.

Compliance:
Before the next start of the engine - before the next flight.

Technical publication of the manufacturer:
Fischer + Entwicklungen Service Bulletin No. 5004/5 of December 03, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Fischer + Entwicklungen GmbH & Co. KG
Sonnenring 38

D-8300 Landshut-Altdorf
Federal Republic of Germany

Accomplishment and log book entry:
Action to be accomplished by Fischer + Entwicklung, Sonnenring 38, D-8300 Landshut-Altdorf, Phone: (0) 871 - 32099 or an approved service station authorized by F+E and to be checked and entered in the log by a licensed inspector.

SAFETY FLASH

PILOT SECURITY & COCKPIT SAFETY

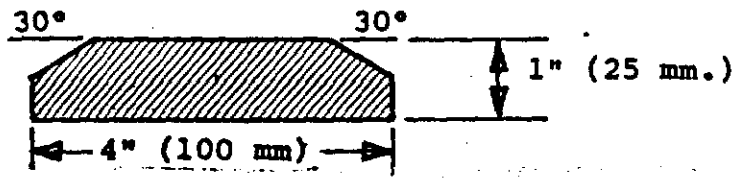
Last year there was one fatality because of soft cushions used as packing behind the pilot. During a winch launch the cushions compressed sufficiently to cause the pilot to slip backwards and lose control of the glider.

There are two problems, the acceleration phase and the climbing attitude. In the climb, with a typical semi-reclining seat, virtually the whole of the pilot's weight is compressing the 'cushion'. **Cushions, as such, should be banned from the cockpit! Why not organise a cushion hunt in your club.**

Packing behind a pilot should be of rigid or stiff material. Chip foam with a compressibility of about 10% is OK: don't accept more. Try this simple test on the material you use. Measure the thickness of the material and put it on the ground with a wooden board on top of it. Stand with both feet on the board and get an observer to measure the compressed thickness. The reduction is the amount you will move back in the worst case.

Energy-absorbing foam on the seat reduces the risk of spinal injury. One-inch material is the minimum thickness to give this protection. Undoubtedly a number of pilots have reduced the extent of their injuries or avoided them by this means.

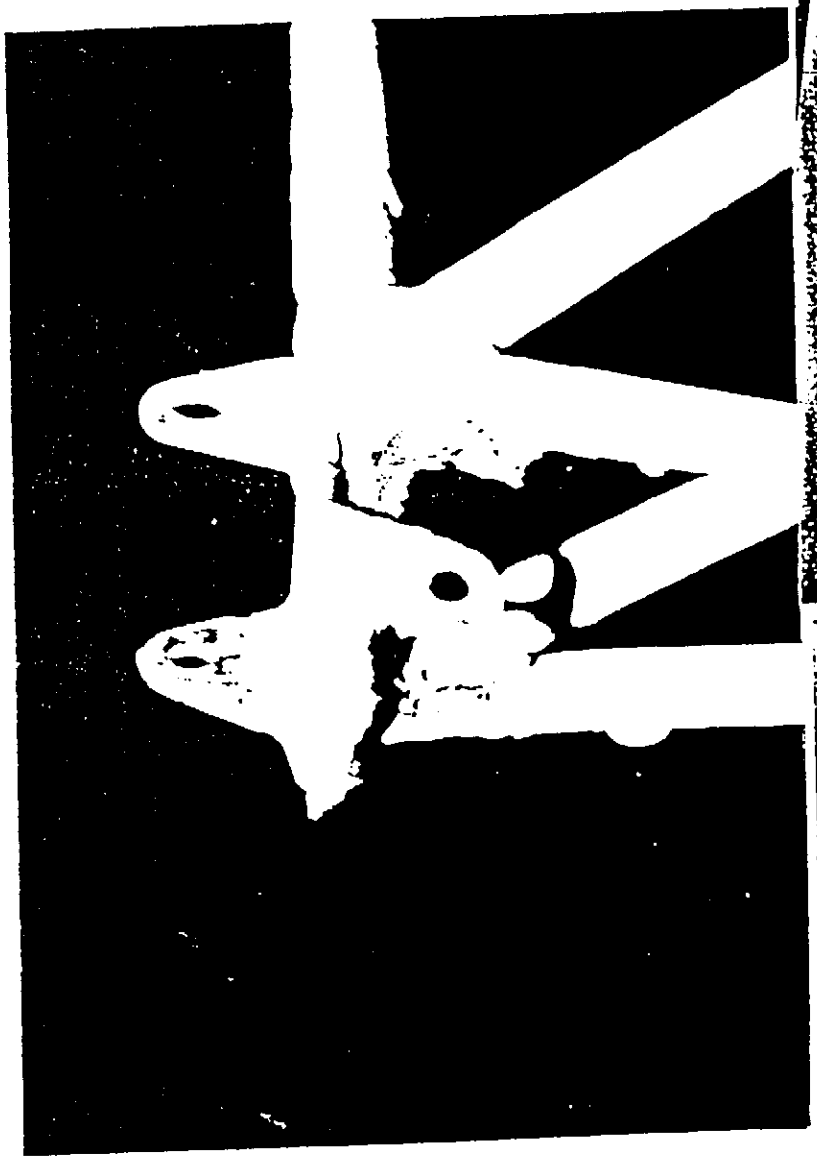
Lumbar support, also made of firm material, placed between the parachute and the pilot serves to maintain the correct curvature of the spine. The cross-section should be:

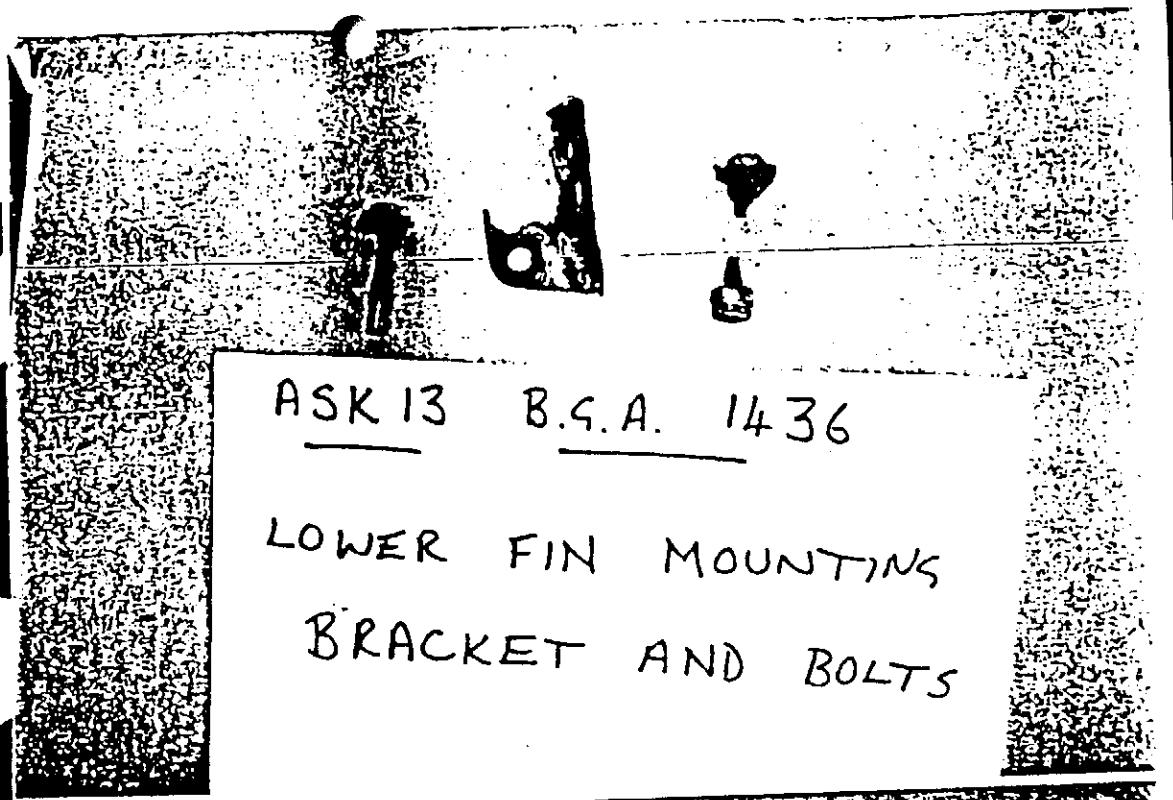


. . . and the length about 10 inches (250 mm). It can be held in place with velcro.

Correct curvature effectively increases the strength of the spine by 60%. **For best effect instructors should avoid leaning forward when landing.**

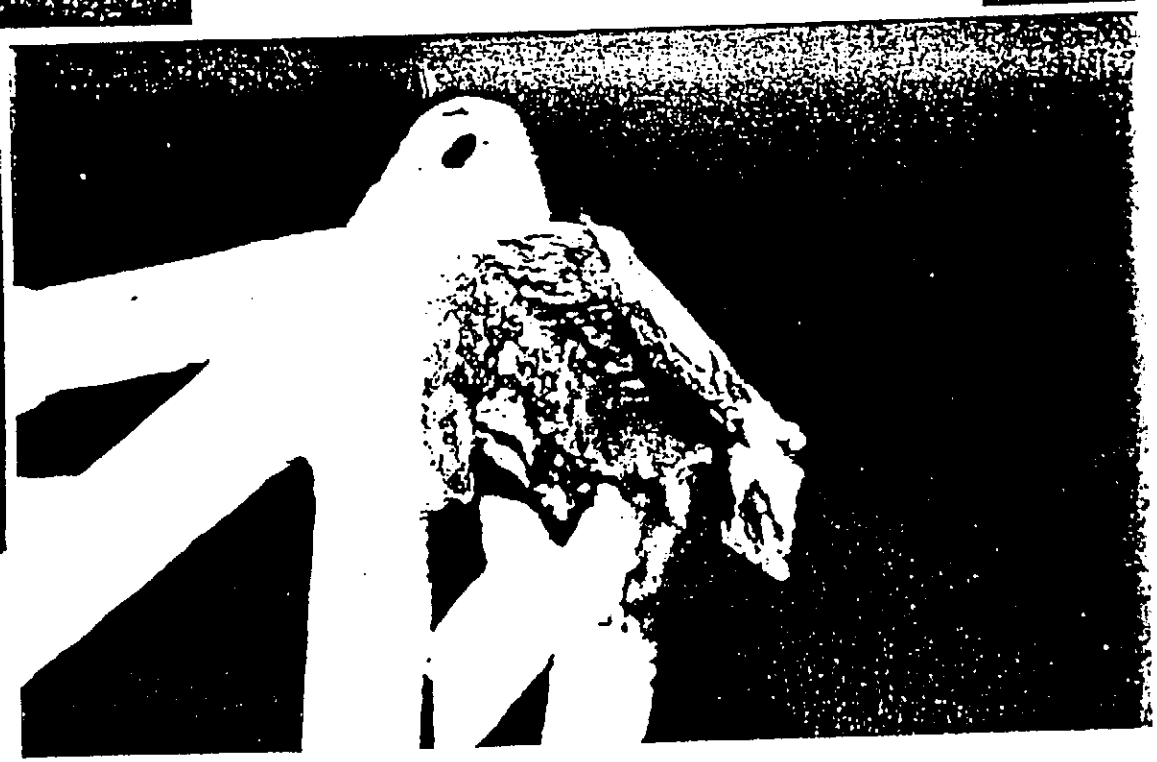
Ballast must be properly secured. Ballast which is tied in or held in place by the pilot sitting on it is dangerous. It can slip and foul the control column. Ballast attachments should be 'design approved'; ask a BGA inspector or the Chief Technical Officer if your arrangement is safe.





ASK 13 B.G.A. 1436

LOWER FIN MOUNTING BRACKET AND BOLTS



PROPERTY OF THE UNDER MENTIONED PLEASE RETURN TO :-

SOLE UK DISTRIBUTOR
Peter Clifford & Co.,
Aeronatutical Consultants & Sales,
15 Home Farm,
Crowmarsh Gifford,
Wallingford
Oxfordshire OX10 8EL
England
Tel: 0491 39316 / 680420 Fax: 0491 39316

MANUAL FOR OPERATION AND MAINTENANCE OF THE L13 BLANÍK SAILPLANE WITHOUT OVERHAULS

PART 1

Approved by:

Dipl. Eng. Vlast. MERTL
Chief Designer of Let
Nat. Corp.

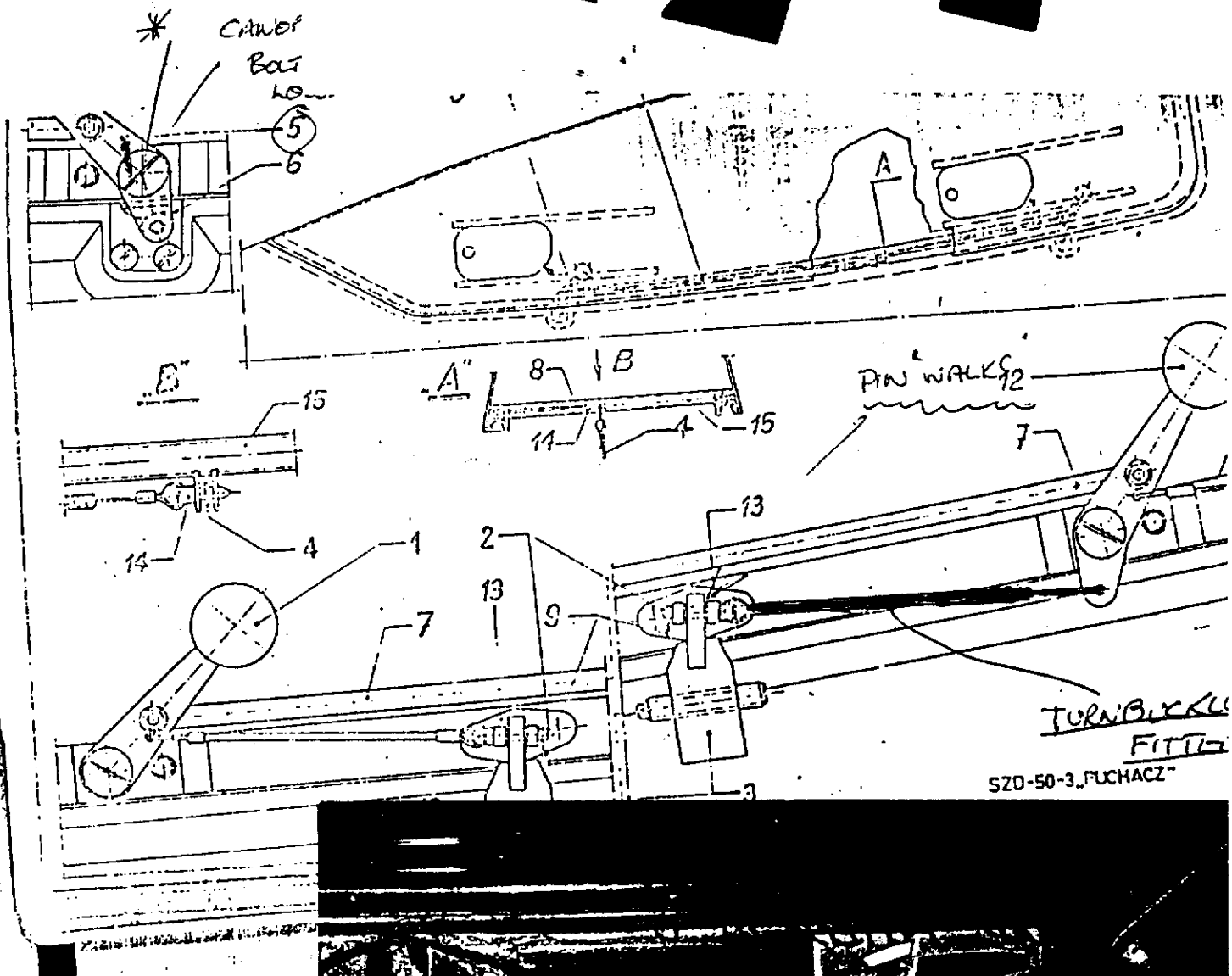
Approved by:

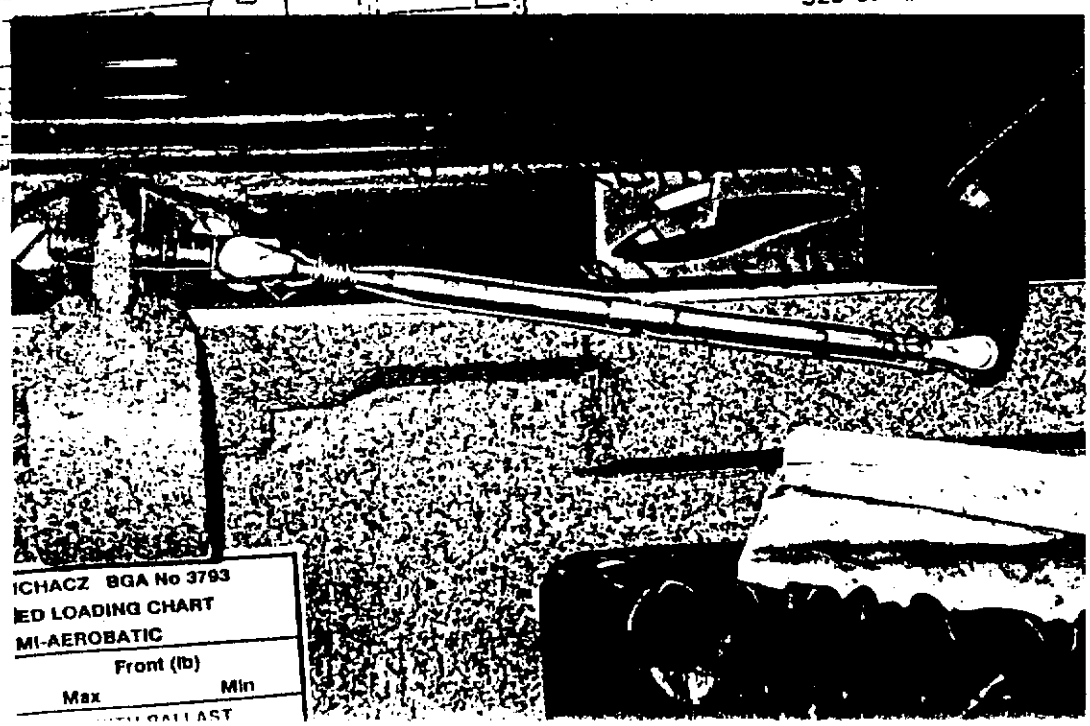
Dipl. Eng. Mir. KOHOUT
Chief of Technical
Inspection Board of
State Aviation Inspection,
Prague

Date of Edition:
August 1, 1985

CANOPY Handle

PUCH. HCZ -





Puchacz Canopy Mods.

Southdown G.C.

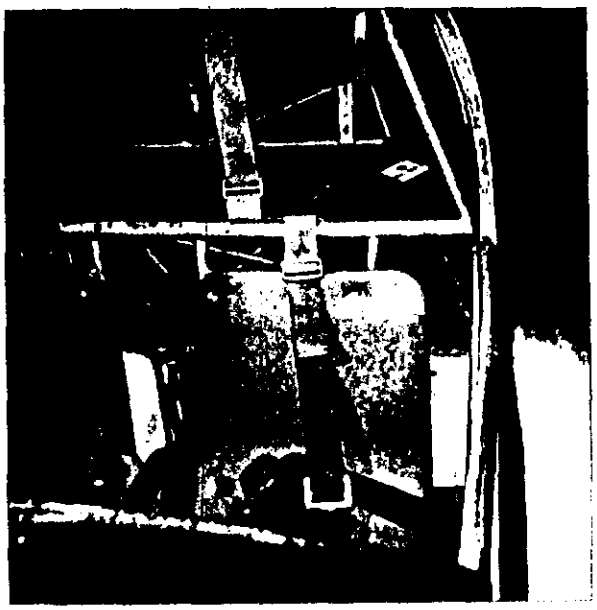
(RON KING)

BRITISH GLIDING ASSOCIATION
KIMBERLEY HOUSE,
VAUGHAN WAY, LEICESTER,
TEL. LEICESTER (0533) 531051

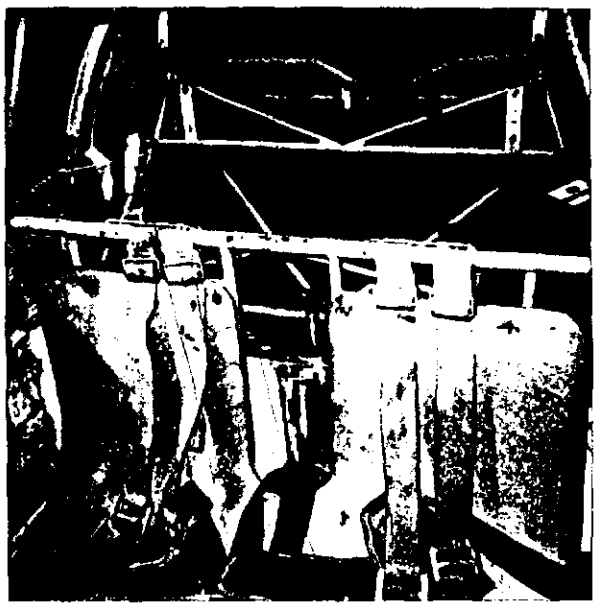
TOP HARNESS ATTACHMENTS.

ASTIRs / Falkes / T61's etc.

WRONG!!



CORRECT!



TOP HARNESS ATTACHMENTS

BRITISH GLIDING ASSOCIATION
KIMBERLEY HOUSE,
VAUGHAN WAY, LEICESTER,
TEL. LEICESTER (0533) 531051

TNS/1/93

Tas 1/1/93

Issue 12
January 1993

GROB G109 SERIES MOTOR GLIDERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
83–6	Flight Manual – Correction of pages.	Applicable to all Serial Nos. Exchange pages 4, 11, 31, 37, 41 and 43 of the Flight Manual dated 14–12–1982 on or before 31 March 1983 for new ones. Grob Technical Note No. 817–8 refers.
83–104	Gravity Range – Correction of Flight Manual and procedure for spin recovery.	Applicable to all Serial Nos. Action to be accomplished in accordance with Grob Technical Note No. 817–10 not later than 15 July 1983.
85–132	Main Landing Gear – Fractures of the undercarriage legs.	Applicable to G109 and G109B Serial Nos. as detailed in AD. Compliance required as detailed in AD. Grob Technical Information TM 817–19 also refers.
85–218/2	Flight Controls – Aileron flutter at speeds above 190 km/h.	Applicable to G109B Serial Nos. as detailed in AD. Compliance required as detailed in AD. Grob Technical Note No. 817–20 also refers.
86–219	Flight and Maintenance Manuals – Replacement of pages.	Applicable to all G109 motor gliders. Compliance required as detailed in AD. Grob Technical Information TM 817–22 also refers.
87–142/2	Fuel – Inspection and replacement of the lower sealing ring in the fuel shut-off valve.	Applicable to G109 and G109B motor gliders. Compliance required as detailed in AD. Grob Technical Note No. 817–23 also refers.
88–50	Inspection and replacement of the two inner elevator hinges.	Applicable to Grob G109B Serial Nos. 6200 to 6445 inclusive. Compliance required as detailed in AD. Grob Technical Note TM 817–25 also refers.
90–315	Fuselage – Inspection of studs in the root rib stud plate.	Applicable to G109B Serial Nos. 6200 through 6362. Compliance required as detailed in AD. Grob Service Bulletin G109B, TM 817–29 also refers.

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
92–189	Ignition – Inspection of the Bendix magnetos at the Grob 2500 engine.	Applicable to G109B Serial Nos. 6200 and subsequent. Compliance required as detailed in AD. Grob Service Bulletin TM 817–34/2 also refers.
92–198	Extension of service life.	Applicable to G109 and G109B all Serial Nos. Compliance required as detailed in AD. Grob Service Bulletin TM 817–28/1 also refers.
92–350	Flight Controls – Inspection of drain holes in the elevator (including trim tab).	Applicable to G109B Serial Nos. 6200 and subsequent. Compliance required as detailed in AD. Grob Service Bulletin TM 817–35 also refers.
92–356	Flight Controls – Inspection of the airbrake stops.	Applicable to G109 Serial Nos. 6001 up to 6159 and G109B Serial Nos. 6200 and subsequent. Compliance required as detailed in AD. Grob Service Bulletin TM 817–36 also refers.
92–359	Exhaust – Inspection of the exhaust system.	Applicable to G109 and G109B aircraft. Compliance required as detailed in AD. Grob Service Bulletin TM 817–32 also refers.

Issue 8
December 1992

GLASER-DIRKS DG–400 AND DG–500 SERIES MOTOR GLIDERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
83–171	Flexible wing fuel tanks.	Applicable to DG–400 Serial Nos. as detailed in Airworthiness Directive. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/3 also refers.
84–155	Rotax 505 engine, canopy jettison device, DEI, towing cable release mechanism.	Applicable to DG–400 Serial Nos. 4–1 to 4–87. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/6 also refers.
84–157	Power plant, vibration cracks.	Applicable to DG–400 all Serial Nos. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/11 also refers.
85–219	Replacement of fuel shut off valve gaskets.	Applicable to DG–400 Serial Nos. 4–1 to 4–140. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/14 also refers.
85–223	Powerplant – cable guides – inspection to prevent possible fouling of engine extension.	Applicable to DG–400 Serial Nos. 4–1 to 4–140. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/15 also refers.
86–138	Improved marking of canopy emergency release and re-location of ventilation placard.	Applicable to DG–400 Serial Nos. 4–1 to 4–176. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/16 also refers.
87–108	Inspection/Modification of engine extension/ retraction drive.	Applicable to DG–400 Serial Nos. 4–1 to 4–188. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/18 also refers.

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
87–109	Inspection/Modification of engine wiring.	Applicable to DG–400 Serial Nos. 4–1 to 4–178. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/19 also refers.
88–99	Empty weight CG range, plugged piece of hose at the pneumatic fuel pump, manual revisions and locking pins on wing tips.	Applicable to DG–400 Serial Nos. 4–1 to 4–228. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/20 also refers.
90–43	Modification of powerplant.	Applicable to DG–400 Serial Nos. through 4–249. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/22 also refers.
91–149	Modification of powerplant.	Applicable to DG–400 Serial Nos. 4–1 and subsequent. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Notes 826/24 and 826/25 also refer.
92–358	Airbrake control/control – hook up shaft 5ST57.	Applicable to DG–500M Serial Nos. 5E30M 14 up to 5E60M 25. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 843/3–2 also refers.

TVS 1/93

BUREAU VERITAS

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspections and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive

Translation of 'Consigne de Navigabilité'
Réf.: 93-004(A)
In case of any difficulty, reference should be made to the French original issue.

CENTRAIR

ASW 20 F Sailplanes

Flight in rough air

The present Airworthiness Directive concerns CENTRAIR ASW 20 F sailplanes, all S/N.

In order to avoid sufficient factor of security for flights in rough air, at the effective date of this Airworthiness Directive, following measures are made mandatory :

1/ Reduce the maximum rough air speed VRA (VB) from 180 to 175 Km/h. (98K)-(96K)

2/ Modify :
   a - Flight Manual
   b - placards
   c - airspeed indicator markings
   To incorporate this new reduced rough air speed.

Record the application of this Airworthiness Directive in the sailplane log book.

Ref. : CENTRAIR SB N° 20-17

EFFECTIVE DATE : JANUARY 30, 1993

n/Z

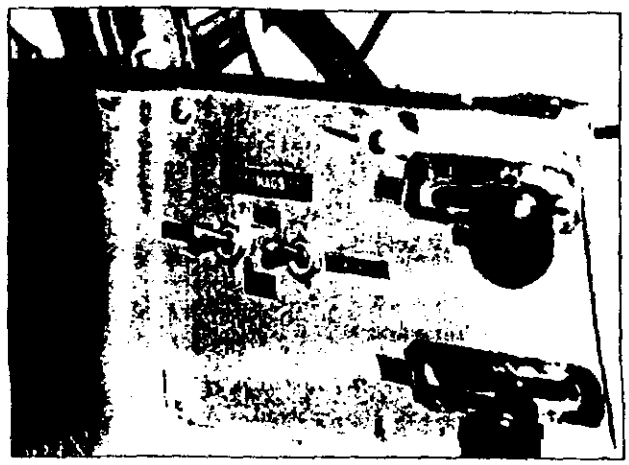
PA18 Mag Switches

E6. AIRCRAFT MODIFICATIONS

Extract from ***Aviation Safety Letter*** published by Transport Canada.

Aircraft Modifications

In December 1991, a Piper PA18 in low level flight was observed to nose over and dive to the ground. The TSB examination of the wreckage revealed no mechanical discrepancies, but the investigation did show that the engine was at low power at impact and that the magneto switches were in the "OFF" position. It was noted that the single rotary switch normal for this series of aircraft had been replaced with two toggle-type switches. Later series of this aircraft were, in fact, fitted with toggle-type switches and switch guards. The modified switches fitted in this particular aircraft were 1/8 inch longer than those fitted in later series aircraft and this installation did not include switch guards. It is possible that, while operating adjacent controls — carb heat, cabin heat, flaps or trim — the pilot inadvertently tripped the mag switches. With both magnetos "OFF", there would have been an immediate total loss of power. In this case switch guards may have prevented the accident.



This incident is a strong reminder that, in all cases where modifications to your aircraft are concerned, they should be very carefully considered and should be completed in accordance with the manufacturer's recommendations. △

CAA COMMENT:

This incident demonstrates the need for modifications to be formally approved. For UK certificated aircraft, they would be subject to the CAA requirements for the approval of a minor modification.

E7. AIRWORTHINESS PROMULGATIONS

CAA Airworthiness Directives

002-12-92	Stampe SV4	Lift Wire attachment brackets - inspection for presence of cracking.

CAA Letters of Transmittal

27 Dec 1992 (FAA Emerg AD 92-26-10)	Cessna 402C	Installation of placards that specify higher unusable Fuel Limitations.
5 Jan 1993 (FAA Emerg AD 92-27-20)	Cessna 402C	Revision of above.

CAA Letters to Operators - Nil

FAA Airworthiness Directives (Bi-weekly Lists 92-23, 24 and 25)

92-23-04	Beech 58 various serial	To prevent loss of throttle control.
92-26-02	Piper PA31	To prevent improper sealing of the engine baffle seals.
92-26-04	Cessna 210	To prevent loss of engine power due to inadvertent fuel loss.

AIRWORTHINESS DIRECTIVE

93-009 Glaser Dirks

DG. 500's

Date of issue:

05. Jan. 1993

Affected gliders:
German Type Certificate No. 348

Glaser-Dirks
DG-500/22 ELAN and DG-500 ELAN Trainer
- all S/N's

Subjekt:
Manual revisions and rudder sealing

Reason:
1. Manual revision
2. During flight tests at very high speeds rudder vibrations caused by flow separation have been detected. By sealing the rudder gap these vibrations can be eliminated.

Actions:
1. Exchange of manual pages and
2. Installation of rudder gap sealing in accordance with Glaser-Dirks Technical Note No. 348/3S and 348/3T, both dated November 30, 1992.

Compliance:
Actions must be accomplished before February 28, 1993.

Technical publication of the manufacturer:
Glaser-Dirks Technical Note No. 348/3S and 348/3T, both dated November 30, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Glaser-Dirks Flugzeugbau GmbH
Im Schollengarten 19-20

D-7520 Bruchsal 4
Federal Republic of Germany

Accomplishment and log book entry:
Action to be accomplished by an approved service station, an authorized person or the holder and to be checked and entered in the glider's log by a licensed inspector.

AVIOSTAR
Luftfahrttechnische Entwicklungen GmbH

S - 02 - 91 R.F.5 Series.

R.F.5 SPEED BRAKES.

Subject: Damages on the plain bolts in the speed brake assembly especially the plain bolts of the speed brake locking device.

Affected: Aircraft types Fournier RF5 (Motorglider Data Sheet 695)
RF5B, Sperber all serial numbers

Priority: 1. During next 50 h check
2. After max. 1000 landings

Description: During routine checks damages on the plain bolts A5 h11x14 DIN 1444 of the speed brake assy within the wing middle section behind the spar were recocnized.

I was found that the bearing aeras at the four clevises of the actuating lever as well as the operating rod were excessive warn-out.

These complaints was recocnized at aircraft with more than 1000 landings.

Correction Procedure: Disassemble all plain bolts of the speed brake assy within the wing middle section.

Check the parts with regard of the above mentioned damages.

Replace plain bolts of damages are visible.

Assemble all plain bolts to the speed brake assy and check correct operation of the downlock mechanism as well as the extension of the flaps.

Material: Plain bolt LN 1434-05x14
Quality: 1.1174.5

Alternative:

Plain bolt DIN 17200
Quality: CK 35 temper-hardened
Tensile strength 700-900 N/mm²

Weight: Not affected

Center of Gravity: Not affected

Remarks: The replacement of the plain bolts should be carried out by approved workshops or by authorized persons.
Please substitute page p.24 (RF 5) and p.22 (RF 5B) of the maintenance manual.

Prepared: Werner Bodenheim
Date: 28.11.1991

LBA-Approval:
Date: 22 Juli 1992

Checked: Gerold Hupperich
Date: 28.11.1991

Date: 17.02.1992

B.G.A. WINCH/AUTO TOW WEAK LINKS

Revised April 1991 From TOST DATA SHEET 2/4/90 With Amendment As Authorised By B.G.A.*

	NOT EXCEEDING KP			NOT EXCEEDING KP	
ASTIR (s) Single	500	No.5	Eagle	600	No.4
TWIN ASTIR	845	No.3	EON. PRIMARY	500	No.5
ASH 25	900	No.2.	EON. BABY	600	No.4
ASK 14	830	No.3	ELF.S.2.	540	No.5
ASK 15	500	No.5	Falcon	500	No.5*
ASK 17	600	No.4	Fauvel	500*	No.5
ASK 19	600	No.4	Fauvette 905	500*	No.5
ASK 20	600	No.4	FOKA 3/4/5	720	No.4
ASK 21	1000	No.1	Geier II	765	No.3
ASK 22	900	No.2	Glasflugel 604	850	No.2
ASK 23	680	No.4	Goevier III	1030	No.1
ASK 24	600	No.4	Grunau /5	540	No.4
AV.36	600	No.4	Gull 1/3/4	500	No.5
Austria Std.	670	No.4	Harbinger	500	No.5*
BergFalke 2	970	No.2	Hornet	500	No.5
BergFalke 3	1070	No.1	Hutter 17	500	No.5
BergFalke 4	750	No.3*	Iris (D77)	500*	No.5
Bijave (WA30)	600*	No.4	IS.28B2	600	No.4
Blanik	630	No.4	IS.29/30/32	500	No.5
Bocians	1000	No.1	Jantor Std	530	No.5
Breguet 905	600	No.4	Jantar 2	600	No.4
BG. 135	600	No.4	Jantar 3	600	No.4
Cadet Mkl & 2	500	No.5	Janus B	600	No.4
Cadet Mk3 (T31)	500	No.5	Janus C	750	No.3
Caproni A21	600	No.4	Jaskolka	500*	No.5
Capstan	600*	No.4	Javelot	500*	No.5
Carman JP15	600	No.5	Junior	500	No.5
Centrair 101	600	No.4	JP 36A	500*	No.5
Cirrus	860	No.2	KA 1 & 3	450	No.6
Cirrus (Std)	500	No.5	KA 2	600	No.4
Cumulus	540	No.5	KA 4	900	No.2
Cobra	600	No.4	KA 6	650	No.4
Condor	1000	No.1	KA 7	1080	No.1
			KA 8	668	No.4
Dart 15/17/	500	No.5	KA 13	1080	No.1
Delphin	700	No.4	Kestrel 17/19	630	No.4
Diamant 16.5/18	935	No.2	Kite 1.2B	500*	No.5
Discus	650	No.4	Kranich II/III	960	No.2
DG 100/200/	500	No.5	Kranjanek	500*	No.5
DG 400	500	No.5	LAK 12	600*	No.4
DG 300/600	680	No.4	Libelle (201)	500	No.5
Doppleraab	800	No.3	Libelle H.301	670	No.4

	NOT EXCEEDING KP	
LS 1	500	No.5
LS 3	600	No.4
LS 4	600	No.4
LS 6	600	No.4
LS 7	600	No.4
LO-100	650	No.4
M 100	500*	No.5
M 200	600*	No.4
Meise	670	No.4
MG 19A	950	No.2
Mosquito	650	No.4
Moswey	650	No.4
Minimoa	500	No.5
Mucha Std.	820	No.3
MU 13	535	No.5
Nimbus 2	600	No.2
Nimbus 3	750	No.3
Nimbus 3.24 &3D	1040	No.1
Nimbus - Mini	600	No.4
Olympia 1&2	500*	No.5
Olympia 460/463	500*	No.5
Olympia 419	600*	No.4
Peak 100	600*	No.4
Petrel	500*	No.5
Phoebus (all)	1000	No.1
PIK 20E	600	No.4
PIK 16/20	530	No.5
Pilatus B4	500	No.5
Pirat	600*	No.4
Prefect	500*	No.5
Puchacz	750	No.3
Rheinland	500*	No.5
Rhonlander 2	500*	No.5
Rhonlerche 2	900	No.2
Rhonsperber	500*	No.5
Sagitta	600*	No.4
SB.5	600*	No.4
SF.26	650	No.4
SF.27A	750	No.3
SF.34	600	No.4
S.G.38	300	No.7
SHK	700	No.4
SIE 3	700	No.4
Silene (E.78)	600*	No.4
Sky	500	No.5
Skylark 1.2.3.4.	500	No.5
Spatz	520	No.5
Sperber	1030	No.1
Suid III	500	No.5
Swallow	500	No.5
Swift	500	NO.5

	NOT EXCEEDING KP	
T.21	500*	No.5
T.31	500*	No.5
T.53/YS53	750*	No.3
Torva	500*	No.5
Tutor	500*	No.5
Vega	600	No.4
Ventus	650	No.4
Viking (V.G.C.)	500*	No.5
Wassamer WA26	500*	No.5
Weihe	670	No.4
Zugvogel 1.2.	720	No.4
Zugvogel 3.	742	No.4
Zugvogel 4	690	No.4

TOST COLOUR CODING

Black	No.1	1000 daN	= 2200 lbs
Brown	No.2	850	= 1870 lbs
Red	No.3	750	= 1650 lbs
Blue	No.4	600	= 1320 lbs
White	No.5	500	= 1100 lbs

N.B. If in doubt:

Tost apply a factor of 1.3 x Max all up weight of glider to determine Weak Link Strength for winch/autotow.

DATA FROM TOST Kindly Supplied to BGA By Chiltern Sailplanes Ltd, Booker Airfield, Marlow, Bucks, SL7 3DR. 0494-445854

INS 1/2/92 ISSUE 5 Amendments as indicated in BOLD.

FEB 1992